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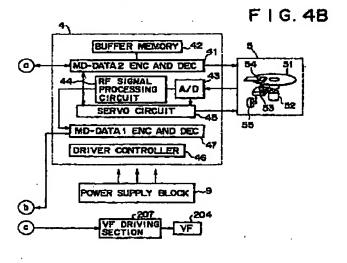
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## (54) Reproduction apparatus and reproduction method

(57) The invention provides an apparatus and method which allows playback of both of a first optical disc wherein the opposite side faces of a groove formed thereon are wobbted at a first predetermined frequency and a second optical disc wherein one of the opposite side faces of a groove formed thereon is wobbled at a second frequency shorter than the first predetermined

frequency while the other face of the groove is formed as a flat face. In the apparatus and method, it is discriminated whether an object optical disc (51) of playback is the first optical disc or the second optical disc, and various servo systems are switched based on a result of the discrimination.





Application Number EP 99 10 3552

		ERED TO BE RELEVAN						
Category	Citation of document with it of relevant pass	ndication, where appropriate, ages		elevant claim	CLASSIFICATION APPLICATION			
x	EP 0 525 896 A (PHI 3 February 1993 (19 * the whole documer	193-02-03)	1,	11,13	G11B7/09 G11B7/007			
A	EP 0 798 702 A {SON 1 October 1997 {199 * the whole documen	7-10-01)	1,0	6,11,				
A	PATENT ABSTRACTS OF vol. 1998, no. 06, 30 April 1998 (1998 & JP 10 040549 A (S 13 February 1998 (1 * abstract *	3-04-30) SONY CORP),	13	6,11,				
A	EP 0 745 978 A (NIF 4 December 1996 (19 * claim 1; figure 3	196-12-04)	1					
					TECHNICAL FI SEARCHED	ELDS (int.Cl.6)		
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	BERLIN ATEGORY OF CITED DOCUMENTS	E : earlier pats	rincipie unde	rlying the è	nas, Y evertion thed on, or	·		
Y:par	ticularly relevant if taken slone ticularly relevant if combined with and unsent of the same ontagory hoological background	ther D : document L : document	after the filing date D: document afted in the application L: document afted for other regions					
O : no	n-written disolosure emediate document				, porresponding			

### EP 0 938 084 A3

# ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 99 10 3552

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

14-12-1999

Patent document cited in search repo	rt	Publication date	Patent family member(s)	Publication date
EP 0525896	A .	<b>03-02-1993</b>	AT 147185 T CN 1069593 A,B CZ 284509 B DE 69216318 D DE 69216318 T FI 923428 A JP 5205296 A SG 43986 A SK 237592 A RU 2096836 C US 5235583 A	15-01-199 03-03-199 16-12-199 13-02-199 19-06-199 02-02-199 13-08-199 14-11-199 09-11-199 20-11-199
EP 0798702	Α	01-10-1997	JP 9259440 A US 5844882 A	03-10-199 01-12-199
JP 10040549	A	13-92-1998	NONE	
EP 0745978	A	04-12-1996	JP 8329492 A AU 689038 B AU 5453396 A CA 2177546 A CN 1142106 A US 5936920 A	13-12-199 19-03-199 19-12-199 01-12-199 05-02-199 10-08-199

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82